



Comptroller General
of the United States

Washington, D.C. 20548

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Decision

Matter of: Peterson Builders, Inc.; Swiftships, Inc.

File: B-251695.2; B-251695.3

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DIGEST

1. Agency properly classified a procurement for a special operations craft as a research and development effort, notwithstanding the fact that it calls for modification and integration of existing nondevelopmental items/commercially available components, where each component--as well as the integration of the components into a system--requires significant design modification and engineering expertise to achieve the high performance standards required to meet the agency's minimum needs.

2. Agency's determination not to set aside for small businesses a procurement for a special operations craft prototype with unique, high performance standards is reasonable where the agency concluded from thorough consideration of specialized data bank compiled over a 10-month period--and which was directly based on numerous, extensive consultations with technical and acquisition experts in all related fields of engineering and acquisition expertise; review of all available technical literature, engineering references and market compilations; results of related world-wide market survey; and submissions received in response to request for information issued specifically to verify in-house analysis that no prototype of this type had ever been attempted by the ship-building industry--that given the technical complexity and urgent requirement for the system;

the specific integration of naval, aerospace, and mechanical engineering expertise necessary to properly develop the craft; and the unproven capabilities of the ship-building industry, it could not reasonably expect to receive the best scientific and technological sources for the best mix of cost, performances, and schedules from the small business ship-building community.

DECISION

Peterson Builders, Inc. (PBI) and Swiftships, Inc. (SSI) protest the decision by the United States Special Operations Command (USSOCOM) not to issue request for proposals (RFP) No. MDA911-92-R-0001 as a small business set-aside; the RFP calls for a MARK V Special Operations Craft (MK V SOC) and Transporter to be deployed from the C-5 aircraft in support of Special Operations Forces (SOF) missions.

We deny the protests.

BACKGROUND

The Mark V SOC System Requirement

USSOCOM is a specialized, independent joint command within the Department of Defense (DOD) which oversees all special military operations undertaken by the United States; the command is comprised of "special operations" experts from the Army, Navy, and Air Force. The purpose of this procurement is to provide the SOF--particularly, the Navy SEALs--with the "world's fastest" SOC for covert insertion and extraction of SOF personnel at various world-wide locations in a low to medium threat environment.

According to the agency, the patrol boats presently being used by USSOCOM to fulfill its SOF insertion/extraction missions are "sub-standard and invite mission failure due to their not being able to function as required"; in short, the current patrol boats or "combatant craft" upon which USSOCOM relies to perform SOF missions are unable to meet the requirements for SOF insertion/extraction because they were not designed for this purpose. Tr. at 17.¹ Specific examples cited by USSOCOM to demonstrate the shortcomings of current "combatant craft" for the circumstances inherent in SOF insertion/extraction missions include: an account of

¹A 2-day hearing was conducted pursuant to 4 C.F.R. § 21.5 (1993) to receive testimony regarding the technical requirements of this procurement, the contracting officer's acquisition investigation, and the capabilities of the small business community. References to the hearing transcript are identified by "Tr." (transcript) or "VT" (videotape).

one Navy SEAL--as well as the boat itself--being "crushed" due to the patrol craft's inability to negotiate wave conditions (Tr. at 40); incidents where SOF personnel "were passing blood from getting jammed, pounded by the ride" aboard another patrol craft (Tr. at 78); a situation encountered during Operation Desert Shield/Desert Storm where, in performing "attempted downed pilot recoveries . . . one boat . . . fell apart during the [operation] because the seas were too heavy" (Tr. at 16); and the recurring need for SOF teams to perform major repairs to their patrol craft in the midst of insertion/extraction missions due to the fact that current patrol craft are not designed for the sustained speeds and sea state conditions encountered on SOF missions. (Tr. at 20.)

SOF personnel primarily perform "reconnaissance {missions} in advance of an amphibious operation."² Tr. at 42. All SOF missions involve a critical "sense of urgency" as well as a range of volatile circumstances; as such, the types of deployments for which this system is required are very time critical. Tr. at 42. The purpose of the MK V SOC is to swiftly deliver 16 SOF personnel per craft to a destination in top physical condition to perform a mission, and then return them to home base.

The MK V SOC system must be capable of deploying from a United States mainland location via C-5 aircraft to any one of more than 75 possible locations worldwide.³ Because of the three components of this requirement--the craft, the transporter, and the requirement for compatibility with the C-5 aircraft--this procurement requires industry to combine a number of engineering disciplines--mechanical, aerospace, propulsion, naval, and electrical--to arrive at a solution meeting all the required high performance standards. In

²Examples of the range of SOF missions for which this system is required--and where USSOCOM was forced make do with other patrol craft--include: Operation Urgent Fury, Grenada; to protect a United States fleet anchorage off the coast of Beirut; Operation Just Cause, Panama; a 1991 Philippines coup attempt; and Operation Desert Shield/Desert Storm, Persian Gulf. SOF personnel have also been tasked to support drug interdiction operations off the coast of Florida in support of the Coast Guard.

³All SOF missions are conducted as "redundancy" operations; that is, two teams are always sent to perform one mission. Accordingly, USSOCOM envisions conducting these deployments using two C-5 aircraft which will deploy a two-craft detachment and all personnel and support equipment necessary to support extended, self-sustained operations.

essence, the MK V SOC system being procured here constitutes a new generation of craft, never before built by industry.

USSOCOM's Technical Approach

According to the agency, USSOCOM's urgent need for a high performance SOC specifically designed for SOF mission insertion/extraction became apparent to Congress during Operation Desert Shield/Desert Storm when SOF missions and personnel were repeatedly jeopardized by various patrol craft failure and damage. In early 1991, USSOCOM was apprised that Congress intended to make funding available for the MK V SOC within that fiscal year; consequently, the agency immediately began developing and drafting the performance requirements package for the system and investigating the appropriate acquisition method for acquiring the craft.

From the outset, USSOCOM recognized that the craft it required to perform the SOF insertion/extraction missions would have to have capabilities which far exceeded the known capabilities of craft currently produced by industry; briefly stated, USSOCOM determined that the craft would have to support a heavy payload capacity, travel great distances at the fastest speeds possible without physically damaging its crew and passengers, and be capable of rapid deployment to missions all over the world. If the SOF teams had not urgently required this craft, USSOCOM reports that it would have proceeded to either develop the design for the craft/transporter system using its own in-house architects and engineers, or conducted a design-specific procurement to produce this boat from a paper design--i.e., from "scratch." However, USSOCOM determined that given the SOF teams' immediate demand for this craft, it simply did not have the time for a "classic" research and development (R&D) effort.

In light of these time constraints, and the technical complexities inherent in developing this craft, USSOCOM determined that the most risk-free technical strategy for acquiring the MK V SOC would be to start with commercially available and established designs. By basing the R&D on evolution from proven commercial designs for the required components--such as already existing hulls, transporters, engines, drive systems, weaponry, etc.--the performance, construction, and cost risks involved in developing and constructing the system would be lessened. Tr. at 44.

Selection of the Unrestricted Acquisition Strategy

USSOCOM's acquisition staff have technical backgrounds in the areas for which they are assigned to conduct procurements. The contracting officer for this requirement was assigned to USSOCOM in February of 1991; his background includes a Bachelor of Science in Naval Science from the

Naval Academy, a Masters Degree in Contracting from the Naval Post Graduate School, Monterey, California, and extensive fleet experience with fast attack nuclear submarines. VT at 10:30-10:31. In April of 1991--in coordination with the development of the MK V SOC's performance requirements--USSOCOM assigned the contracting officer to the SOC group of the agency's "Special Naval Warfare" division--the activity responsible for developing the MK V SOC performance requirements--where he was directed to "[b]ecome accustomed with anything oriented towards the SEALs." VT at 10:32:59. In April of 1991, the contracting officer began an investigation to determine the proper acquisition method for this requirement, specifically, whether the procurement should be set aside for small business.

Federal Acquisition Regulation (FAR) § 19.502-2(a) requires an acquisition to be set aside exclusively for small business participation if the contracting officer determines that there is a reasonable expectation that offers will be obtained from at least two responsible small business concerns and that award will be made at a fair market price. However, in the case of R&D efforts, the regulation contains an additional requirement:

"In making R&D small business set-asides, there must also be a reasonable expectation of obtaining from small business the best scientific and technological sources consistent with the demands of the proposed acquisition for the best mix of cost, performances, and schedules."

Here, to ascertain whether small businesses would offer the "best" in the context of FAR § 19.502-2(a) for this requirement, the contracting officer searched for evidence that the small business community had performed an integration R&D effort similar to that involved in the MK V SOC project.

Before embarking on his investigation of industry capability, the contracting officer studied and familiarized himself with the operational requirements data (ORD) package for the MK V SOC system. The record shows that, to achieve an in-depth technical understanding of the ORD, the contracting officer conferred extensively with many technical experts in USSOCOM and other DOD agencies and was kept apprised of all the performance modifications which evolved as the performance standards technical development process progressed. VT at 10:51-10:52.

The purpose of acquiring this technical expertise was so that the contracting officer could make informed comparisons between the MK V SOC system project requirements and other

similarly complex R&D procurements within the naval, aerospace, and surface transport communities. Because there were no existing craft/transporter systems on the market which contained all the high performance features required here, the contracting officer had no identical requirements, procurement histories, or known sources for this system to which he could refer. Accordingly, to evaluate industry's R&D capabilities for the purposes of producing this system, the contracting officer investigated all relevant industries from which an integrator source for this requirement could be produced.

The contracting officer first consulted with numerous technical and acquisition experts in DOD; specifically, the contracting officer conferred with specialists located in the Naval Sea Systems Command, the Naval Special Warfare Command, SEAL/SOF units, the Army Materiel Readiness Support Activity, the Army Tank-Automotive Command, and the Air Force. The range of personnel consulted included engineers and architects from sea, land, and aerospace disciplines, technical and acquisition managers and staff, and developers of applicable military specifications; for example, the record shows that the contracting officer consulted extensively with the developers of Military Standard 1791 (MIL-STD-1791), "Designing for Internal Aerial Delivery in Fixed Wing Aircraft," which is identified in the RFP as a specific reference source regarding requirements for C-5 compatibility in this R&D effort.⁴ VT at 10:35-10:41. Additionally, the record shows that the contracting officer visited actual SOF sites, surveyed patrol craft, and discussed mission/craft requirements and industry capabilities with those SOF teams serving in the field. Id. While conducting these consultations and interviews, the contracting officer also analyzed and read "anything . . . [he] could get [his] mitts on" including relevant DOD data/acquisition files, engineering reference documents, published compilations of existing craft and capabilities in the ship building and aircraft communities, industry journals, and DOD-produced trade journals. VT at 10:49:46.

During his investigation, the contracting officer learned that the Navy was in the process of conducting a world-wide survey to establish a database of what actual and potential fast patrol boat builders could offer in fast patrol craft. The results of this survey became available in September of 1991; at that time, the contracting officer reports that he

⁴MIL-STD-1791 establishes general design and performance requirements for military equipment to be air transported in the cargo compartments for fixed wing aircraft; the standard covers the three "prime mission" cargo aircraft--including the C-5.

obtained a copy of the three volume study and read the survey "from cover to cover." VT at 10:45:01. The responses submitted by industry were divided into the following categories: pleasure boats, work boats, paramilitary boats, race boats, and "Military or Naval boats." Based on the results of the 1991 survey, the contracting officer concluded that there were no companies in the fast patrol boat building industry who had performed the type of R&D integration required for the MK V SOC system effort.

By early 1992, the contracting officer determined that all available data thus far indicated that industry had never before performed the type of integration efforts required by this procurement. On February 3, 1992, to verify the contracting officer's knowledge and to determine whether a competition was possible based on the specifications as currently developed, USSOCOM published a "Request for Information" (RFI) in the Commerce Business Daily, which provided in relevant part:

" . . . [SOC] . . . [USSOCOM] is conducting a survey of potential sources for a coastal patrol interdiction (CPI)/ insertion craft. This is not a solicitation but a request for information. This is a 'sources sought notice' for existing craft and mobilizer¹⁵ systems. It is not an [RFP] for a new design. This craft and mobilizer system must meet specific performance requirements including: [e]xisting craft and mobilizer with full scale operational data to demonstrate that the existing craft and mobilizer provides the following without craft, mobilizer and/or design modification: Max beam [width] about 18 feet (on mobilizer), Max height about 14 feet (on mobilizer), Max length about 85 feet (on mobilizer). Continuous max speed in excess of 45 knots [at] full load in Sea State 3 (SS3), Cruise speed about 35 knots [at] full load in SS3 . . . Sustainability in excess of 12 hours. Current craft, mobilizer and/or design which already includes or can be easily modified or adapted with minor changes to provide Below waterline hull modifications to an existing craft or existing design is NOT a minor change. . . . Responses to this request for information should be submitted to Director, Special Operations Research Development and Acquisition Center. . . ."

¹⁵Neither protester disputes that the term "mobilizer" is synonymous with the term "transporter."

In response to the RFI, USSOCOM received 28 responses; 5 of these responses were submitted by small businesses, including PBI and SSI. Although the RFI had specifically requested information on existing craft/transporter systems, all of the responses proposed a craft alone; further, every proposed craft was a "variant" which differed significantly from its parent, "commercially available" hull form. VT at 11:00. In fact, the responses received deviated so substantially from the RFI that USSOCOM decided to revise its performance specifications to facilitate competition for this requirement.

Based on his analysis of industry responses, the contracting officer determined that given the amount of integration R&D required for this project, he could not reasonably conclude that small business would in fact offer the "best" source for the "best mix" of cost, performance, and schedule for this requirement, as required under FAR § 19.502-2(a). Accordingly, the contracting officer decided to conduct this procurement on an unrestricted basis.

On November 2, USSOCOM published a synopsis indicating that the agency planned to issue an RFP to acquire the MK V SOC; on December 10--after obtaining the Small and Disadvantaged Business Utilization Specialist's concurrence--the contracting officer executed a standard form (SF) 1877, thereby authorizing the procurement to be conducted as an unrestricted procurement. On December 14, the RFP was issued as an unrestricted solicitation;⁶ on December 18 and January 4, 1993, PBI and SSI filed these protests.

PROTESTERS' CONTENTIONS

PBI and SSI challenge the agency's decision to conduct the procurement on an unrestricted basis on the following grounds. First, the protesters assert that the MK V SOC system requirement is not an R&D effort and, accordingly, the "best" proviso set forth at FAR § 19.502-2(a) is inapplicable. The protesters argue that since USSOCOM knows of at least two small business ship-builders with proven patrol

⁶The MK V SOC system is being procured in two stages. Stage I--this RFP--calls for development and construction of the test craft/transporter packages; this stage anticipates multiple awards of cost-plus-fixed-fee contracts for numerous prototype craft. USSOCOM will then test and evaluate each craft/transporter package. These results will determine which Stage I contractors will be included in a limited competition for production units of the selected craft--Stage II; for this stage, the government contemplates the award of a firm, fixed-price contract with fixed-price quantity options.

boat building capability (i.e., the protesters themselves; this procurement should be conducted as a small business set-aside. The protesters also argue that the contracting officer failed to make a reasonable investigation of small business R&D capability before deciding to proceed with this requirement as an unrestricted acquisition.

DISCUSSION

R&D Classification

As noted above--and as indicated in the agency's internal source selection information documentation--because of time constraints, the MK V SOC program is designed to "extensively utilize and exploit nondevelopmental item (NDI)⁷ technology and commercially available marine components for all aspects of the program [so that] [t]he acquisition thrust is one of integration of NDI off-the-shelf components, subsystems, and systems." In this regard, the RFP as currently written provides that "this procurement is expected to result in customized variations of proven parent hull forms integrating commercially available marine components, and a transporter."

The protesters do not dispute the agency's requirements for this system or USSOCOM's urgent need for the MK V SOC system; by the same token, neither protester specifically objects to the agency's decision to focus on the use of commercially available items. Rather, relying on both the "NDI" and "commercially available" component language repeated throughout the current RFP and the agency's internal acquisition documents, the protesters assert that this

⁷"NDI" is a military classification defined by Defense Federal Acquisition Regulation Supplement (DFARS) § 210.001 to "include: (1) any item of supply available in the commercial marketplace; (2) any previously-developed item of supply that is in use by a department or agency of the United States, a [s]tate or local government, or a foreign government with which the United States has a mutual defense cooperation agreement; (3) any item of supply described in (a) or (b) above that requires only minor modification in order to meet the requirements of the contracting agency; or (4) any item of supply that is currently being produced that does not meet the requirements (a), (b) or (c) above solely because it is not yet in use or is not yet available in the commercial marketplace."

requirement has been erroneously classified as an R&D procurement. Specifically, SSI contends that:

"By definition, the MK V system will not require the application of scientific research beyond the state-of-the-art, nor will it require the utilization of 'scientific discoveries or improvements in technology' for developing major components or subsystems."

In a similar vein, PBI appears to suggest that this requirement is not R&D since the technical integration required under this procurement is "not complex, but a mere engineering question," which, according to PBI, given the capabilities of small business patrol craft boat builders, is not so technologically challenging as to render this procurement an R&D effort. As explained below, we find that there are several aspects of this requirement which--notwithstanding the focus on utilizing commercially available/NDI items to the maximum extent practicable--clearly render this requirement a highly challenging, and risky, R&D effort.

Based on the negative experiences encountered with predecessor craft used for SOF insertion/extraction missions, the agency is imposing the following mandatory high performance characteristics for the MK V SOC. First, the craft itself must be capable of sustaining a minimum "cruise" speed in sea state three (SS3) of 30 knots for a minimum range of 500 nautical miles (n.m.); the craft must also be capable of sustaining a "maximum" speed in sea state two (SS2) of 45 knots for a minimum range of 250 n.m.⁸ Additionally, the craft must be capable of carrying 5 crew and 16 combat-equipped passengers, and--when loaded to full capacity--transporting a minimum "payload capacity" of 6,400 lbs. The craft is also required to carry out these performance requirements for a minimum 12-hour mission, and ensure that the SOF teams reach their mission point in top physical condition.

These craft-specific requirements--as identified in the RFP--merely represent the minimum "threshold" of what the agency deems necessary. In fact, USSOCOM ideally requires a craft with an SS3 sustained cruise speed capability of 35 knots and an SS2 sustained maximum speed capability of 50 knots; with respect to the preferred range for these speeds, the agency requires an SS3 cruise speed range of 675 n.m. and an SS2 maximum speed range of 300 n.m. These

⁸Sea states are a function of wind and wave height measurements. SS3 refers to wave conditions of approximately 4.6 feet in height; SS2 refers to wave conditions of approximately 2.9 feet in height.

more stringent requirements are set forth in the RFP as "objectives"; section M of the RFP, "Evaluation Factors for Award," provides that "[f]or those requirements where an objective is stipulated, an offeror whose proposal provides for capability above the performance thresholds will be evaluated more favorably, risk and cost considered."

Next, as noted above, USSOCOM is also requiring offerors to propose a transporter for the MK V SOC which, for purposes of this discussion, is analogous to a highly sophisticated tractor trailer. Because of the MK V SOC's anticipated size and weight, the environments in which the transporter will be expected to operate, and the requirement for C-5 transportability, the transporter itself must contain several "high performance" features. First, the transporter must be configured to carry an estimated 75-ton weight--the combined weight of the craft and transporter--over "arterial, collector and local industrial roadways," as well as be capable of navigating over unimproved overseas ground environments. The transporter must also be capable of executing complex navigation maneuvers; specifically, the transporter must be "capable of negotiating a right-angle intersection between two 34-foot wide roadways joined by a 25-foot radius curve." In sum, given the tonnage of the MK V SOC, and the less than favorable ground conditions, "[i]f the transporter isn't properly conceptualized and designed, then the harmonics [of] bouncing down . . . third world roads . . . are transmitted to the craft," rendering the craft susceptible to disalignment or breakage. Tr. at 70-71. Additionally, as explained below, the transporter must be amenable to complex loading and steering operations so that it can be loaded aboard the C-5.

The requirement for C-5 aircraft compatibility imposes the greatest restrictions on the craft and transporter component design. The craft--along with its transporter--must be fully air deployable within 48 hours notice,⁹ in the C-5 aircraft without disassembly except for railings, antennas and weapons.¹⁰ Given the complexity involved in loading a craft of this size and weight onto the C-5, the transporter must be configured so that it can "be doing things . . . up and down and left and right" to facilitate safely loading

⁹In fact, the RFP establishes a 24-hour deployment capability as an objective.

¹⁰The C-5 aircraft is a high speed, high capacity, long range aircraft for transportation of cargo and troops. A special feature of this aircraft is its loading capabilities; the aircraft has the ability to kneel to various loading heights for both its fore and aft loading ramps. Cargo can literally be driven on or off the plane.

the system aboard the aircraft. Tr. at 36, 39. Additionally, both the transporter and the SOC have to be designed to fit the dimensional limitations of the C-5 cargo space, which in this case--after subtracting the cargo space allocated for government-provided equipment"--leaves an available "footprint" for the SOC system of approximately 85 feet in length by 18 feet in width. The complex mechanics involved in maneuvering the MK V SOC and its associated transporter aboard the C-5--as well as the design of these two components--are further complicated by the dimensions of the loading ramp and doorframe. Tr. at 35. The C-5 deck has an 18-foot ramp; the geometric perimeter of the doorframe consists of a rectangular lower half (18 feet wide by 9 feet high) topped by a 4 foot high trapezoidal roof with a roof width limitation of 12 feet.

In addition to the impact of these physical envelope limitations on the size and capabilities of the MK V SOC and transporter--factors which can be characterized as "ground limitations"--the transport of this craft by air presents additional design problems/limitations for the individual craft and transport not otherwise encountered by these components during surface transport. Specifically, the forces exerted on cargo during flight--for example, take-off, landing, turbulence, or shifts in flight conditions (i.e., negative gravity)--which are the direct result of inflight maneuvers are clearly of a different nature and magnitude from those exerted on the ground. As such, inflight conditions require a different engineering and aerospace expertise than those associated with naval/ground engineering design. Tr. at 68. Failure to adequately compensate for these in-flight forces/occurrences in the design of the MK V SOC or its associated transporter can result in a range of catastrophes including "holes punched in the boat," Tr. at 70, damage to either component as a result of "shock loads," Tr. at 25, or even total aircraft failure. Tr. at 70. In short, the SOC and its associated transporter must be designed to withstand the demanding internal dynamics of C-5 flight.

Part 35 of the FAR, "RESEARCH AND DEVELOPMENT CONTRACTING," sets forth the following definitions with respect to R&D. FAR § 35.001 provides, in relevant part:

- "'Applied research' means the effort that
- (a) normally follows basic research, but may not be severable from the related basic research;
 - (b) attempts to determine and exploit the

"Each MARK V SOC system is to be transported along with a mandatory "detachment" of two "humvees" and the "prime mover," the vehicle used to pull the transporter.

potential of scientific discoveries or improvements in technology, materials, processes, methods, devices, or techniques; and (c) attempts to advance the state of the art.

"Development' . . . means the systematic use of scientific and technical knowledge in the design, development, testing, or evaluation of a potential new product or service (or of an improvement in an existing product or service) to meet specific performance requirements or objectives. It includes the functions of design engineering, prototyping, and engineering testing"

Additionally, FAR § 35.002, states:

"The primary purpose of contracted R&D programs is to advance scientific and technical knowledge and apply that knowledge to the extent necessary to achieve agency and national goals. . . . [M]ost R&D contracts are directed toward objectives for which the work or methods cannot be precisely described in advance. It is difficult to judge the probabilities of success or required effort for technical approaches, some of which offer little or no early assurance of full success. The contracting process shall be used to encourage the best sources from the scientific and industrial community to become involved in the program"

Given these definitions, and the complexities involved in designing and constructing both the individual components as well as the overall MK V SOC system, we think this requirement is reasonably categorized as an R&D effort. Except for the limitations imposed by the high performance requirements set forth above--essentially categorized as underway performance, overland transportability, and aircraft compatibility--and the time constraints--imposing the requirement that industry develop the MK V SOC from already proven hull craft and commercially available component and subcomponent designs--the exact physical dimensions, component/subcomponent configurations, and parameters of the MK V SOC system are not clearly established, or otherwise specified in the RFP. In fact, it is still not known whether the industry can produce a craft meeting the current high performance standards.

Moreover, the record conclusively shows--and the protesters do not dispute--that there is no boat craft/transporter system in existence which can fulfill this requirement; thus, the RFP clearly requires construction of a prototype system, and advancement into "a domain in which nobody has

had any experience." Tr. at 32, 66, 72, 73. Thus, the effort here clearly appears to involve R&D. Accordingly, we think the proviso regarding small business set-asides for R&D efforts in FAR § 19.502-2(a) applies here and the contracting officer was required to review the capabilities of the small business community to determine whether small business reasonably could be expected to produce the "best" source for the MK V SOC system.

The Contracting Officer's Investigation

As noted above, where, as here, a requirement constitutes an R&D effort, a contracting officer need not restrict an acquisition to small businesses unless he has a "reasonable expectation of obtaining from small business the best scientific and technological sources consistent with the demands of the proposed acquisition for the best mix of cost, performances and schedules." [Emphasis added.] FAR § 19.502-2(a).

The protesters contend that even assuming this procurement was properly classified as an R&D effort, the contracting officer's decision to conduct the procurement on an unrestricted basis was improper since the contracting officer did not conduct a reasonable investigation of the R&D capabilities of small business.

Generally, we regard a contracting officer's decision regarding whether to set aside a procurement as a matter of business judgment within the contracting officer's discretion, which we will not disturb absent a clear showing that it has been abused. FKW Inc., B-249189, Oct. 22, 1992, 92-2 CPD ¶ 270. The use of any particular method of assessing small business capability is not required so long as the agency undertakes reasonable efforts to locate responsible small business competitors. See Raven Servs. Corp., B-243911, Aug. 27, 1991, 91-2 CPD ¶ 203. Factors that may constitute adequate grounds for not setting aside a procurement include prior procurement history, the nature of contract, the type of contract, market surveys, and/or advice from the agency's technical specialists. FKW Inc., supra.

In this case, we conclude that the contracting officer's investigation was reasonable. As noted above, the agency's need here is for the development of a complex system which, except for "pie-in-the-sky" paper designs, has never been attempted or built by any industry, large or small. The record shows that in conducting his investigation, the contracting officer compiled an "in-depth personal data base" founded on extensive study of industry capabilities which accessed sources at the highest levels of professional expertise; in this regard, the record shows that there is a wealth of reliable statistics and readily accessible market

analysis regarding the ship-building industry put together by both DOD intelligence and independent publishers. Based on this investigation, the contracting officer concluded--we think reasonably--that there were no indicators that any source had performed an integration effort of the magnitude called for to successfully develop the MK V SOC system. The contracting officer concedes that the protesters have successfully built patrol craft--and that either firm might in fact propose a system warranting award under the procurement; however, given the fact that neither of these firms or any other small business has performed the type of craft-transporter-aircraft integration called for here, we think that the contracting officer reasonably concluded that small business could not be regarded as offering the "best scientific and technological sources," for the "best mix of cost, performances, and schedules," as required under FAR § 19.502-2(a).

Notwithstanding the information available to the contracting officer to ascertain industry capabilities for this requirement, the protesters contend that language contained in the February 1992 RFI discouraged them from submitting R&D capability statements. The protesters point out that the synopsis did not specifically identify this requirement as an "R&D" effort. The protesters also contend that because the RFI does not exactly mirror the RFP as currently written, the five small business submissions received in response to the RFI do not reflect that industry's capabilities for this requirement. In essence, the protesters assert that after modifying the RFP, the agency was required to "reconsider" small business capability by either soliciting specific responses from the interested boat builders regarding the revised requirements, or issuing another RFI based on the modified requirements.¹²

As noted above, after receiving industry's responses to the RFI--none of which proposed the required system, and all of which proposed a "variant" craft--USSOCOM determined that some modifications to the requirement would have to be made

¹²In advancing this argument, the protesters rely on our decision in Jands, Inc., and Columbia Graphics Corp., 66 Comp. Gen. 559 (1987), 87-2 CPD ¶ 19; we think this case is distinguishable from Jands. First, in this case, there is no directly applicable procurement history; additionally, unlike in Jands--where the synopsis was issued for the express purpose of determining small business interest and ability--the purpose of the RFI here was to verify the contracting officer's independent findings regarding industry capability based upon his prior 10-month investigation. Finally, unlike the case here, Jands did not involve an R&D effort.

in order to proceed with any kind of competition; in short, without changes, it was evident to the agency that there would be no competitors. Accordingly, the agency incorporated language into the RFP providing that "[t]he term minimal variant shall mean a hull which differs from a parent hull by not more than plus or minus [15] percent in length and [width] and [10] percent in displacement"; this language contemplates a craft which can vary from its parent form by as much as 7 percent. Additionally, the agency modified the 45 knot maximum speed requirement to specify SS2 instead of SS3.

The agency has presented convincing arguments that these changes are not as significant as argued by the protesters. The agency points out that these changes relate only to one single aspect of the system--the craft itself--and as such, will only be necessary in the event that an offeror's chosen parent hull form is incapable without modification of meeting the performance requirements of the individual components and system. Even assuming, however, that the protesters would have changed their responses to the RFI in light of these modifications, we do not think that the contracting officer was required to resurvey the small business community.

While the RFI did not contain the words "R&D," we think it clear that any industry in the business of building boats--or familiar with the integration technology required here--should have recognized based on the requirements set forth in the synopsis that this effort required a system not in existence, as well as R&D integration expertise. The 28 responses to the RFI support this theory; not one response proposed an existing "system" or even an "existing" craft capable of meeting just the craft-specific performance requirements. In sum, the RFI made it clear that the individual components and the integration of these components would have to push the current state-of-the-art in ship-building; as such, we think small business was given a fair opportunity to demonstrate its R&D capabilities to provide this craft system.¹³

CONCLUSION

The record shows that USSOCOM requires the best prototype MK V SOC system which the industry can offer and that the development of the system's components--as well as their integration--represents a monumental R&D undertaking, never

¹³In this regard, the evidence on the record suggests that the ship-building industry was fully aware of USSOCOM's requirement for a craft with the capabilities of the MK V SOC even before issuance of the RFI.

before achieved by any industry. As the record contains no evidence of any advantage in the small business community in performing such a task, the agency decision to proceed with an unrestricted acquisition is unobjectionable in light of the proviso for R&D acquisition set forth at FAR § 19.502-2(a).

The protests are denied.

for *James F. Hinchman*
for James F. Hinchman
General Counsel